

SH
11
A47

FISHERY MARKET NEWS

OCTOBER 1945 - SUPPLEMENT

FAO - WITH SPECIAL REFERENCE TO FISHERIES

CONTENTS

	PAGE
INTRODUCTION	2
REPORT OF FISHERIES COMMITTEE	6
I - COLLECTION, ANALYSIS, INTERPRETATION, AND DISSEMINATION OF INFORMATION	6
II - SCIENTIFIC, TECHNOLOGICAL, SOCIOLOGICAL, AND ECONOMIC RESEARCH	8
III - EDUCATION	10
IV - CONSERVATION AND DEVELOPMENT	10
V - PROCESSING, MARKETING, AND DISTRIBUTION	11
VI - NATIONAL AND INTERNATIONAL CREDITS	12
VII - COMMODITY ARRANGEMENTS	12
VIII - ADVISORY COMMITTEE	13
REPORT OF THE STATISTICS COMMITTEE	13
REPORT OF THE MARKETING COMMITTEE	13

PHOTOGRAPH OF THE MEMBERS OF THE FISHERIES COMMITTEE	3
LISTING OF THE PERMANENT ADDRESSES AND TITLES OF THOSE ATTENDING THE FISHERIES COMMITTEE MEETINGS	14
FIGURES: WORLD COMMERCIAL FISHERY PRODUCTION BY COUNTRIES	5
WORLD FISHERY PRODUCTION BY WATERS	7
WORLD FISHERY PRODUCTION BY HEMISPHERES	7
WORLD FISHERY PRODUCTION BY CONTINENTS	7
TABLES: PRODUCTION PER CAPUT IN VARIOUS COUNTRIES	14
WHALE PRODUCTION	14
COMMERCIAL FISHERIES OF THE WORLD	18
FISHERY RESOURCES OF THE UNITED STATES	OUTSIDE BACK COVER

ISSUED BY THE
UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
WASHINGTON





FISHERY MARKET NEWS

A REVIEW OF CONDITIONS AND TRENDS OF THE FISHERY INDUSTRIES

PREPARED IN THE DIVISION OF COMMERCIAL FISHERIES

A. W. Anderson, Editor

C. R. Lucas, Associate Editor

J. M. Lemon - - - - TECHNOLOGY

W. H. Dumont - - MARKET NEWS

E. A. Power - - - - STATISTICS

R. A. Kahn - - - - ECONOMICS

Leo Young - - - - MARKET DEVELOPMENT



Applications for FISHERY MARKET NEWS, which is mailed free to members of the fishery industry and allied interests, should be addressed to the Director, Fish and Wildlife Service, United States Department of the Interior, Washington 25, D. C.

The Service assumes no responsibility for the accuracy of material from outside sources.

October 1945 - Supplement

Washington 25, D. C.

Vol. 7, No. 10a

FAO - with Special Reference to Fisheries

*By A. W. Anderson**

In May and June of 1943, the United Nations Conference on Food and Agriculture was held at Hot Springs, Virginia. This Conference established an Interim Commission on Food and Agriculture which drafted a constitution for a proposed Food and Agriculture Organization of the United Nations. The formal convening of the first session of FAO - as it immediately became designated - occurred in Quebec on October 16, 1945, when the constitution was signed by delegates from 30 of the nations present at Hot Springs. Before the session concluded, the number of nations accepting the principles of FAO increased to over 40. The purposes for which FAO was established, as outlined in the constitution, are as follows:

Raising levels of nutrition and standards of living of the peoples under their respective jurisdictions,

securing improvements in the efficiency of the production and distribution of all food and agricultural products,

bettering the condition of rural populations,

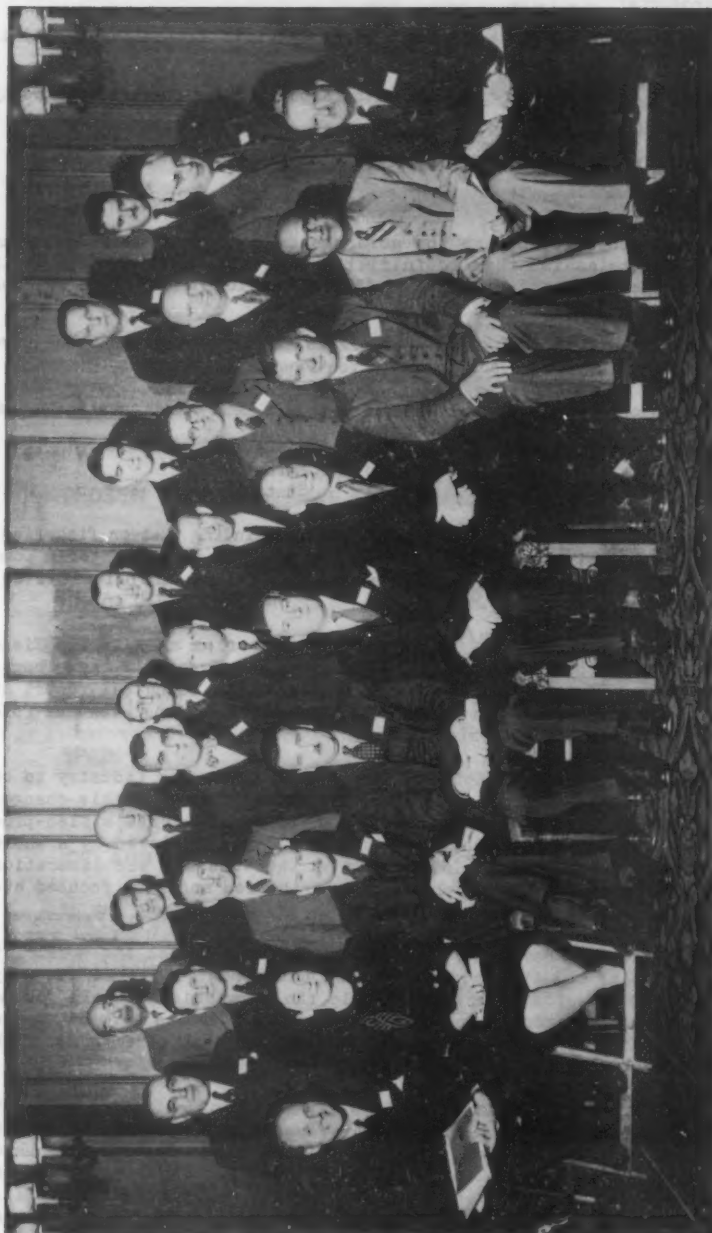
and thus contributing toward an expanding world economy.

The functions of FAO involve the collection and dissemination of information, the promotion and recommendation of national and international action, and the furnishing of such assistance and the organization of such missions as may be requested. The specific functions, as listed in the constitution follow:

1. The Organization shall collect, analyze, interpret, and disseminate information relating to nutrition, food, and agriculture.
2. The Organization shall promote and, where appropriate, shall recommend national and international action with respect to
 - (a) Scientific, technological, social, and economic research relating to nutrition, food, and agriculture;
 - (b) the improvement of education and administration relating to nutrition, food, and agriculture, and the spread of public knowledge of nutritional and agricultural science and practice;

* Chief, Division of Commercial Fisheries, Washington 25, D. C., and Fishery Adviser at Quebec to the U. S. Member, Secretary of Agriculture, Clinton P. Anderson.

NOTE: For the permanent addresses and titles of those attending Fisheries Committee meetings see p. 14.



MEMBERS OF THE FISHERIES COMMITTEE

ROWS HEAD:	<u>PHILIPPINES</u> RUIZ	<u>NORWAY</u> GERHARDSEN	<u>DENMARK</u> JACOBSEN	<u>NEW ZEALAND</u> POTTINGER	<u>NETHERLANDS</u> VAN DIJK	<u>FRANCE</u> INTERPRETER	<u>CANADA</u> PREFONTAINE	<u>SECRETARIAT</u> TREMBLAY
CENTER:	<u>UNITED KINGDOM</u> DUNN	<u>SOUTH AFRICA</u> DREGSTI	<u>SOUTH AFRICA</u> LABRIE	<u>UNITED STATES</u> ANDERSON	<u>UNITED STATES</u> MURRAY	<u>AUSPALLIA</u> DAY	<u>UNITED KINGDOM</u> LOVERN	<u>C. N. A. D. A</u> MORROW CAMERON
FRONT:	<u>DENMARK</u> JUL	<u>SECRETARIAT</u> LOVE	<u>FINLAND</u> FINN	<u>UNITED KINGDOM</u> GUSHUE	<u>ICELAND</u> THORS	<u>NORWAY</u> NOTEVARP	<u>SECRETARIAT</u> NEEDLER	<u>INDIA</u> PRASHAD
ABSENT:	<u>AUSTRALIA</u> GARGSIDE	<u>BELGIUM</u> LALWAND	<u>CANADA</u> COLLIP	<u>CHINA</u> WANG	<u>GREECE</u> VASHADZIDES	<u>MEXICO</u> GONZALEZ	<u>NEW ZEALAND</u> MIDDLEHASS	<u>PANAMA</u> HEURTEMATTE
			<u>SOUTH AFRICA</u> GARDNER	<u>U.S.S.R.</u> NIKISHIN	<u>UNITED STATES</u> CALE	<u>VENEZUELA</u> FALCON-BRICEAU		

- (c) the conservation of natural resources and the adoption of improved methods of agricultural production;
- (d) the improvement of processing, marketing, and distribution of food and agricultural products;
- (e) the adoption of policies for the provision of adequate agricultural credit, national and international;
- (f) the adoption of international policies with respect to agricultural commodity arrangements.

3. It shall also be the function of the Organization

- (a) To furnish such technical assistance as governments may request;
- (b) to organize, in cooperation with the governments concerned, such missions as may be needed to assist them to fulfill obligations arising from their acceptance of the recommendations of the United Nations Conference on Food and Agriculture; and
- (c) generally to take all necessary and appropriate action to implement the purposes of the Organization as set forth in the Preamble.

Development of a program of work for FAO was delegated to six main committees in Quebec:

Nutrition and Food Management	Fisheries
Agriculture	Marketing
Forestry and Forest Products	Statistics

As a basis for their discussions, five of these committees, including that on fisheries, were able to use excellent technical reports prepared at the request of the Interim Commission. The fisheries report was drafted by representatives from Canada, the United States, Newfoundland, Iceland, and Norway.

Twenty-three representatives of nations^{1/} interested in fisheries made up the Fisheries Committee at Quebec. Under the guidance of the Chairman, the Honorable Thor Thors, Icelandic Minister to the United States, this committee discussed the technical report at length, revised some sections, added others, and concluded its deliberations with the following recommendations^{2/} to FAO for its fisheries program:

Fisheries is one of the first, if not the first, food-producing industry to be affected by the cessation of belligerent action and by the suddenness of this change. The unbalancing effect of war, which thrust upon one-half of the world's fish-producing nations the task of keeping up production to the levels achieved by a whole world, and now the sudden reversion--the liberation of the seas and the liberation of effort--have sharply emphasized the problems of distribution and have focused attention on the faults in the distribution mechanism.

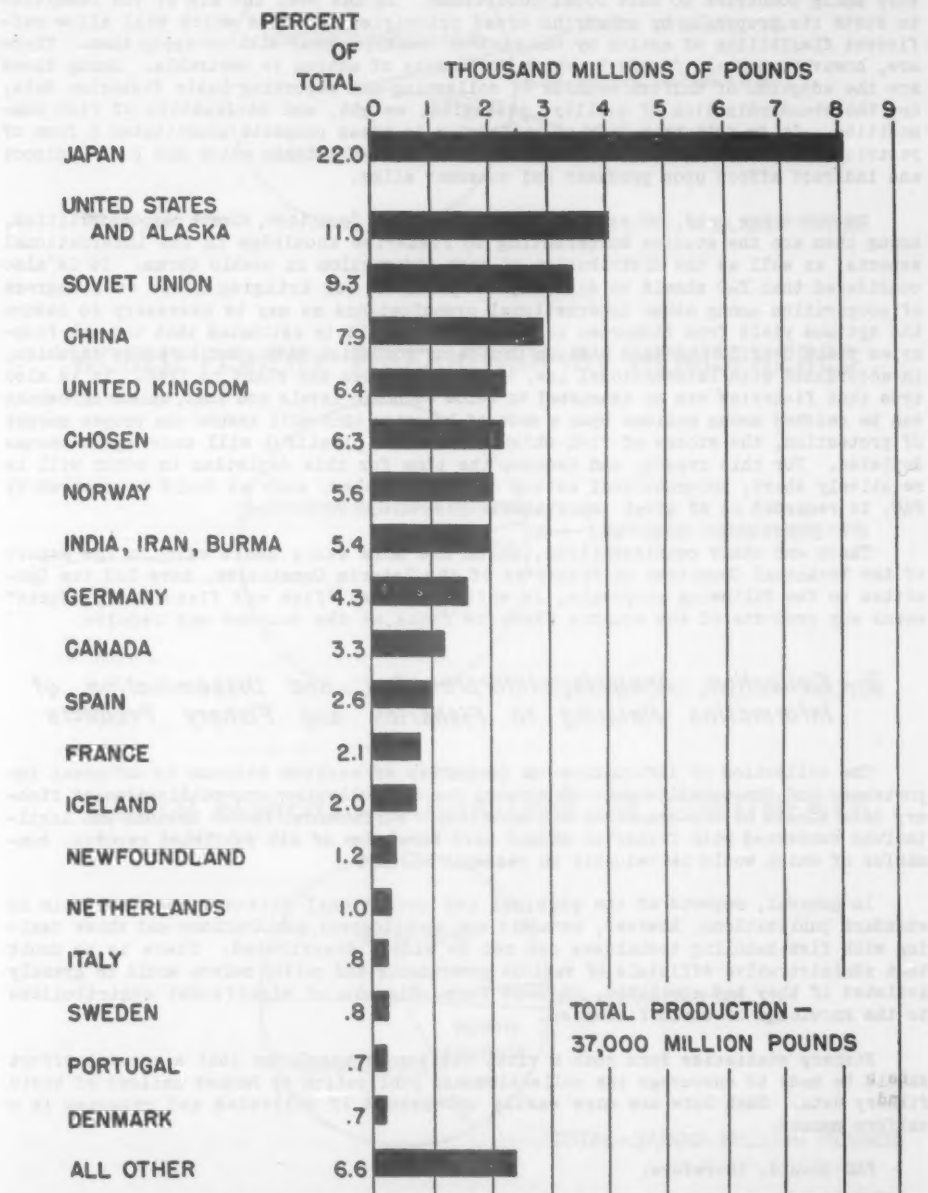
The Fisheries Committee has borne this in mind in its approach to its work. It has realized the complexities and the intricacies and has deemed it to be its duty to render such advice to Commission A as would enable the Commission to make recommendations to the Conference regarding some of the approaches that can be made to the problems surrounding production, distribution, and the ultimate use of fish and fish products within the framework of the Food and Agriculture Organization.

In so doing, it has borne in mind that FAO is a developing organization and that its beginnings can only foreshadow its ultimate achievements. With this thought in mind, the Committee's suggestions for the initial activities of the Organization have been framed with caution and have been limited to those that the Committee believes will be within the competence of the Organization during its early stages and will, at the same time, enable it to render practical and useful service to the Member nations in the field of fisheries.

1/ Australia, Belgium, Canada, China, Czechoslovakia, Denmark, France, Guatemala, Greece, Iceland, India, Iraq, Mexico, Netherlands, New Zealand, Norway, Panama, Philippines, Union of South Africa, USSR, United Kingdom, United States, and Venezuela.

2/ Report of Committee IV (Fisheries) to Commission A, Doc. 142, A/IV/5, October 27, 1945.

FIGURE 1
**WORLD COMMERCIAL FISHERY PRODUCTION
 BY COUNTRIES**



SOURCE: U.S. FISH AND WILDLIFE SERVICE

It is realized that Member governments themselves, acting within their administrative and legislative spheres, will be largely responsible for bringing into practical being the reforms which may come as a result of the work of the Food and Agriculture Organization. The effectiveness of agreements reached, under the encouragement, or the auspices, of FAO, will depend upon the willingness and ability of governments to implement recommendations. Undoubtedly, the application of these recommendations will vary among countries to suit local conditions. It has been the aim of the Committee to state its proposals by embodying broad principles in words which will allow sufficient flexibility of action by the various countries that wish to apply them. There are, however, certain fields in which uniformity of action is desirable. Among these are the adoption of uniform methods of collecting and reporting basic fisheries data, and the standardization of quality, packaging, weight, and designation of fish commodities. It is felt that lack of uniformity in these respects constitutes a form of restriction upon the free flow of commodities between nations which has both a direct and indirect effect upon producer and consumer alike.

On the other hand, FAO has, in the opinion of the Committee, direct responsibilities. Among them are the studies contributing to fisheries knowledge in its international aspects, as well as the distribution of such information in usable forms. It is also considered that FAO should be directly responsible for bringing about such degrees of cooperation among other international organizations as may be necessary to insure the optimum yield from fisheries in the high seas. It is estimated that the sea fisheries yield over 30 thousand million pounds of food fish each year in areas in which, in accordance with international law, every nation has the right to fish. It is also true that fisheries can be exhausted to below economic levels and that, unless agreement can be reached among nations upon a mode of behavior that will assure the proper amount of protection, the stocks of fish which are now so plentiful will once again become depleted. For this reason, and because the time for this depletion to occur will be relatively short, international action on this problem, such as could be secured by FAO, is regarded as of great importance.

These and other considerations, which are more fully dealt with in the Report of the Technical Committee on Fisheries of the Interim Commission, have led the Committee to the following proposals, in which the term "fish and fisheries products" means any products of the aquatic flora or fauna as the context may require.

I - Collection, Analysis, Interpretation, and Dissemination of Information Relating to Fisheries and Fishery Products

The collection of information on fisheries of various nations is of great importance, and the establishment of systems for the collection and publication of fishery data should be encouraged in all countries. Furthermore, Member nations and institutions concerned with fisheries should have knowledge of all published reports, summaries of which would be valuable to research workers.

In general, reports of the physical and nutritional sciences are available in standard publications; however, economic and sociological publications and those dealing with fish-handling techniques are not so widely distributed. There is no doubt that administrative officials of various governments and policy makers would be greatly assisted if they had available, in some form, digests of significant contributions to the knowledge of world fisheries.

Fishery statistics form such a vital section of knowledge that a special effort should be made to encourage the collection and publication by Member nations of basic fishery data. Such data are more easily understood if collected and reported in a uniform manner.

FAO should, therefore,

- (1) encourage provision for exchange of fisheries publications between various countries;

FIGURE 2

WORLD FISHERY PRODUCTION BY WATERS

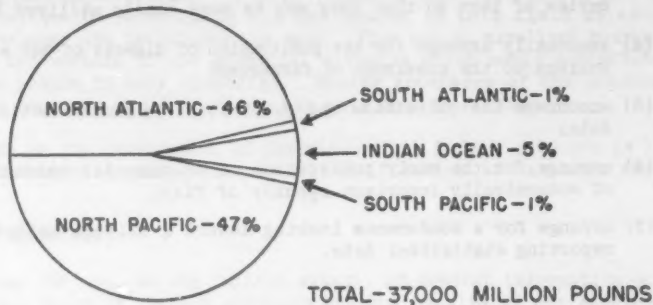


FIGURE 3

WORLD FISHERY PRODUCTION BY HEMISPHERES

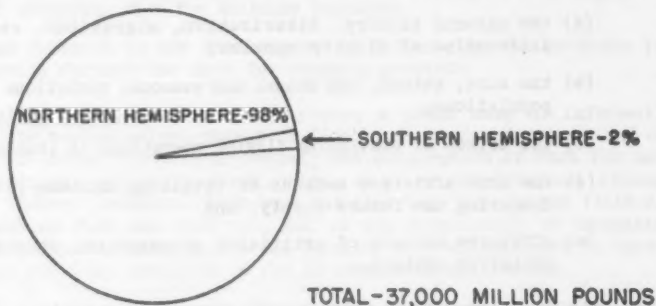
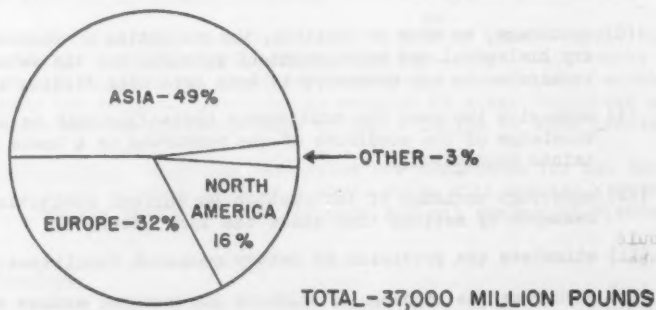


FIGURE 4

WORLD FISHERY PRODUCTION BY CONTINENTS



SOURCE: U. S. FISH AND WILDLIFE SERVICE

- (2) arrange for the publication of a classified catalog of existing fishery data to be supplemented from time to time;
- (3) encourage agencies publishing reports relating to fisheries to print summaries of them so that they may be more easily utilized by research workers;
- (4) eventually arrange for the publication of digests of new and important contributions to the knowledge of fisheries;
- (5) encourage the collection and publication by Member nations of basic fishery data;
- (6) arrange for the early publication of recommended nomenclature and synonyms of economically important species of fish;
- (7) arrange for a conference looking toward a uniform method of collecting and reporting statistical data.

II-Scientific, Technological, Sociological, and Economic Research Relating to Fisheries and Fishery Products

(A) Biological and hydrographical research. Fundamental to the intelligent consideration of fishery resources are investigations to determine:

- (a) the natural history, distribution, migrations, and environmental relationships of fishery species;
- (b) the size, extent, and annual and seasonal variations in abundance of fish populations;
- (c) the effect of continuing fishing operations in abundance;
- (d) the most efficient methods of obtaining maximum production without endangering the future supply; and
- (e) effective methods of artificial propagation, stocking, and disease and pollution control.

The methods and results of these coordinated phases of biological and hydrographical research had begun to attain exact and fruitful levels immediately prior to the war. The scope and magnitude of such research varied considerably among the various primary fishing nations of the world, and some conducted none at all. In no country was the extent of such research commensurate with the magnitude of the fishery resources.

FAO should, therefore,

- (8) encourage, as soon as possible, the resumption of suspended or curtailed fishery biological and hydrographical research and the establishment of such new researches as are necessary to keep pace with fishing activity;
- (9) emphasize the need for continuous investigations to maintain at all times knowledge of the condition of the resources as a basis for perpetuating sustained production;
- (10) encourage exchange of information on current activities and cooperation in research by nations that share the same resources;
- (11) stimulate the provision of better research facilities;
- (12) encourage the exchange of students and research workers among nations in order to promote better opportunities for scientific training as well as to insure the coordination of activities and the improvement of research techniques.

(B) Nutritional and pharmacological research. Research done heretofore, designed to identify and appraise the nutritional components of fishery products, appears to be fairly adequate with respect to protein, fat, mineral content, certain of the essential vitamins, and digestibility. A large volume of this information is available, and scientists continue to investigate all new phases in this field as advances in international knowledge and techniques are made. Fish are an excellent source of proteins, minerals, and certain of the essential vitamins which would contribute to the well-being of the people in many countries. Better knowledge of the preparation of fish for culinary purposes would increase the consumption of fish.

Research done on the development of pharmacological fishery products is less adequate, but such development contributes to diversification of the uses for fishery products.

FAO should, therefore,

- (13) encourage the use, to the fullest extent, of present information on the nutritional value of fishery products and the results of new studies as they are completed, in order to popularize fish as an excellent source of protein, minerals, and certain of the essential vitamins;
- (14) encourage studies to bring about increased consumption of fish, particularly where the present diet consists largely of cereals and pulses;
- (15) encourage the exchange of information on the most satisfactory and attractive means of preparing fish for culinary purposes;
- (16) encourage research on the development of pharmacological products in order to diversify further the uses for fishery products.

(C) Technological research. In recent years, a great mass of information has been assembled on the technological phases of fish production and processing covering the handling of fish aboard the boat or vessel; the preparation of fish for market by icing, freezing, salting, drying, canning, etc.; and the warehousing, storage, and transportation of fishery products. Much work has also been done in the field of fishery byproducts, such as fish meal and oil, and in the development of mechanical devices for their preparation. While much still remains to be accomplished in this field, it is believed that existing knowledge is far in advance of application.

FAO should, therefore,

- (17) direct its efforts toward securing the adoption of the improved methods which have been, or will be, developed. This could be achieved through the establishment of some form of clearing house for periodical reports on research and on relevant patents, thus making available up-to-date information on the scientific handling of fishery products;
- (18) sponsor periodic international conference of fishery technologists to discuss the problems arising in the various countries. This would enable workers who are actively engaged in fishery research to become more widely acquainted with the problems confronting workers in other countries and to exchange ideas that could contribute to the solution of such problems.

(D) Research institutions. Existing facilities are inadequate for the needs of fishery research if it is to be prosecuted on a scale which will develop fishery resources to the full. Further development of centers for all phases of fishery research is required.

FAO should, therefore,

- (19) encourage, through cooperation with the interested international, national, or private bodies, further development of existing research centers and the establishment of new centers in the major producing regions and in areas where fisheries might be more fully developed. Among other activities, these institutions could serve as the focal points for conducting systematic fish-

ery exploratory work to locate virgin fishing grounds and for demonstrating newer techniques of producing, processing, and marketing marine products. They could also study biological and hydrographical, economic, and technical problems of special concern to the areas in which they are located; and they could function in cooperation with existing fishery councils. The operation of research vessels would form an important part of such work.

(E) Sociological and economic research. Since, in many instances, fishermen and shore workers are in the low-income group of labor, more attention should be given to helping them improve their general well-being. The problem of full employment is also vital to the postwar world. Very few studies have been made in the field of fishery economics, but the solution of many fishery problems must depend upon such knowledge.

FAO should, therefore,

- (20) cooperate with such international bodies as those concerned with labor, health, and education to encourage the initiation of studies on such subjects as the relation of fishery methods to production and employment, to the general well-being and public health, to occupational hazards and diseases, and to opportunities for education and community life;
- (21) encourage the primary fish-producing and fish-consuming nations to undertake studies in the field of fishery economics which should extend not only to the economics of production, processing, and distribution (involving studies related to costs, prices, and investments) but also to consumption. These should include problems of collective bargaining and labor organization, recruitment and labor exchange, social security, employment under "lay systems" or fixed wages, living conditions and adequacy of income, insurance laws, credit unions, and cooperatives.

III—Improvement of Education Relating to Fisheries and Fishery Industries and the Spread of Knowledge of Fishery Science and Practice

Available facilities for the training of fishery personnel in all phases of production, processing, and distribution are very limited, and improvement of education relating to fisheries and fishery industries is important to the full development of fishery resources.

FAO should, therefore,

- (22) encourage the establishment of fishery schools and suitable fishery courses at appropriate institutions. As in the case of agricultural schools in many countries, these could serve as training centers for persons specializing in fisheries. The schools should also be centers for specialized fishery courses and for extension work for the dissemination of information to fishermen and shore workers on all phases of production, processing, and distribution.

IV—Conservation and Development of Fishery Resources

(A) Conservation. Fishery conservation problems on the high seas are international in character, but because the problems of conservation are different in the many areas involved, it is considered preferable for any international action for conservation and management to be established on a regional basis. There, should, however, be a free interchange of ideas and information between such regional authorities in order to assist in bringing about a wider degree of coordination and interest.

FAO should, therefore,

- (23) stimulate interest in fishery research in the field of conservation;

- (24) encourage international forms of cooperation and management with a view to the greater future utilization of fishery resources;
- (25) cooperate for this purpose with other international bodies concerned with fisheries;
- (26) explore the possibility of eventually co-ordinating the activities of these organizations under FAO auspices;
- (27) invite Member nations to consider the desirability of arranging periodic conferences between regional authorities, including established national and international councils for the study of the sea;
- (28) lend all possible support to the development of international programs of cooperative research, and, wherever necessary, of joint regulatory action on a regional basis to conserve and bring about the proper management of fishery resources;

(B) Improvement of fishing. The full use of fishery resources depends to a large degree on the development of fishery techniques best adapted to the many different conditions. Progress in such development might be accelerated by a better exchange of information.

FAO should, therefore,

- (29) encourage practical demonstrations of modern fishing vessels and gear. The institutions referred to in section (D) of the second section of the recommendations, among others, could well serve as centers for these demonstration activities. The vessels and equipment could also be used to determine the potentialities of virgin areas;
- (30) encourage the full exchange, directly or through FAO, of information regarding advances in the design of fishing craft and of fishing gear.

(C) Fish culture. The full use of fishery resources depends not only on the management of fisheries to obtain the maximum yield in perpetuity and improvement of fishing techniques, but also on the improvement of conditions for fish reproduction and growth.

FAO should, therefore,

- (31) encourage the adoption of suitable techniques of fish culture wherever facilities and conditions for the propagation of fish render such programs practicable.

V - Improvement of the Processing, Marketing, and Distribution of Fishery Products

The fundamental problem of irregularity of supply should be the concern of all nations. More efficient methods of catch must be employed and, above all, work must continue on the application of newly developed methods of preservation which can act as a buffer against fluctuations in the supply of raw material. These, coupled, with improvements in transportation and in distribution systems, would mean a more regular flow of fishery products to the consumer, which is one of the essentials for any considerable expansion in consumption.

(A) Processing. Processing covers the entire field of fish preservation, including freezing, canning, drying, salting, smoking, and the manufacture of fish by-products. As has already been mentioned, a wealth of information is available on newer and more efficient methods of processing fishery products.

FAO should, therefore,

- (32) encourage the assembling of this information in usable form for dissemination to Member governments;
- (33) where the need exists, encourage Member governments to demonstrate to their peoples, the newer processing methods and techniques. This might be accomplished by the assignment of qualified experts to Member countries upon request. In this connection, the possibilities of using the institutions referred to in section (D) of the second section of the recommendations, should not be overlooked.

(B) Marketing and distribution. There is a wide spread between the landed value of fish and its retail price. Fish, one of the least expensive food products at the point of production, becomes one of the more expensive foods in the retail store. Many reasons have been advanced for this situation, but the fact remains that it retards consumption. Some studies of causative factors in the chain of marketing and distribution have been made but they have not led to a solution. However, studies might be undertaken further to insure the production of wholesome products standardized, where possible, with respect to quality, packaging, weight, and designation.

FAO should, therefore,

- (34) encourage the extension of these studies for the purpose of acquiring knowledge and recommending procedures that will bring fish within the reach of low-income consumers. In this connection, qualified experts might be assigned to Member countries upon request.

VI—Adoption of Policies for the Provision of Adequate Fishery Credits, National and International

Fishery industries in general are undercapitalized; however, technical advances should go a long way toward removing certain of the great risks that have militated against the investment of capital. The pursuit of technical progress will be national in scope. On the other hand, countries where lack of protein is an outstanding national deficiency may stand in need of international credits in order to develop their fisheries.

FAO should, therefore,

- (35) encourage governments to grant credits to assist technical advances;
- (36) be prepared to give expert advice when it is required;
- (37) extend to fisheries; if such international credits are made available, the steps contemplated for agriculture (paragraphs 68 and 69 of the Interim Commission's First Report to Governments).

VII—Adoption of International Policies Regarding Commodity Arrangements for Fishery Products

Commodity arrangements can be successfully applied to fishery products, especially to preserved or non-perishable types.

FAO should, therefore,

- (38) study the possibilities of commodity arrangements as they affect fisheries, particularly as they promote or hinder better orientation of production and as they may be effective in providing opportunities for supplying consumer markets from the most efficient sources of production;
- (39) study, as an integral part of this program, the effects of tariffs and other international barriers on world trade, as well as the effect of abnormal

fluctuations in the exchange rates, which restrict the production, distribution, and consumption of fishery products;

- (40) furnish such information to the governments of producing and consuming countries and to other interested authorities.

VIII-Advisory Committee on Fisheries

In dealing with the many problems likely to arise, particularly during the initial stages of setting up the organization of FAO, the Director-General and his deputies would benefit from consultation with an expert committee on fisheries.

FAO should, therefore,

- (41) appoint an advisory committee on fisheries.

Fishery products were specifically mentioned in the reports of two other committees. The Statistics Committee¹ stated as follows:

"FAO should encourage the publication by Member nations of basic fishery data, with particular attention to those areas which are not at present covered by existing international organizations. The statistics should be assembled by areas and localities from which the fish are obtained. Duplication in quantities of fish landed should be eliminated.

"It should encourage and assist in the exchange among various countries of statistical publications on fisheries. To assist in this FAO should arrange for the publication of a classified catalogue of existing statistical data on fisheries and make provisions for periodically bringing up to date this publication.

"Early publication is needed of statistics on the utilization of fish--the data to include landings (in terms of whole fish) and weight of product marketed. Statistics should be secured to indicate the final use of fish; e.g., human consumption, animal feed, etc. Liver oil should be reported in terms of vitamin A and D potency as well as weight, and industrial use should be distinguished from human consumption.

"Uniform definitions of species of fish, conversion factors to be used to convert the weights of processed products to terms of whole fish, and methods of measuring fish consumption are urgently needed. To contribute to uniform definition of species of fish, an early publication is recommended of nomenclature and synonyms of economically important species of fish.

"Periodical surveys covering the types of gear used and the standard of living of workers in the fisheries should be arranged.

"The loan of experts is especially pertinent with respect to fishery statistics and also early conferences on these matters are considered advisable."

At the request of the Fisheries Committee, the Marketing Committee was requested to give special consideration to probable apparent surpluses of fishery products. In its report², the Marketing Committee therefore suggested that FAO should:

"Investigate, in respect of particular commodities (such as cotton, wool, and fish) the special circumstances which lead to the development of immediate and prospective surpluses or shortages. In particular, the Food and Agriculture Organization should wherever possible relate the treatment of surpluses to the satisfaction of nutritional and other human needs."

FAO's program at present is purely advisory. It will collect and disseminate information, it will offer recommendations, and it will assist Member nations upon request. It

¹/Report of Committee VI (Statistics) to Commission A, Document 160, A/VI/12, October 28, 1945.

²/Report of Committee V (Marketing) to Commission A, Document 152, A/V/7, October 27, 1945.

TABLE I--PRODUCTION PER CAPUT IN VARIOUS COUNTRIES

COUNTRY	PER CAPUT PRODUCTION (POUNDS)	COUNTRY	PER CAPUT PRODUCTION (POUNDS)
ICELAND	5,223	SPAIN	37
NEWFOUNDLAND	1,525	UNITED STATES AND ALASKA	35
NORWAY	680	VENEZUELA	33
JAPAN	111	GERMANY	20
CANADA	109	FRANCE	20
CHOSEN	100	SOVIET UNION	18
KWANTUNG LEASED TERRITORY	67	PHILIPPINE ISLANDS	11
DENMARK	63	ARGENTINA	9
SWEDEN	49	MEXICO	8
UNITED KINGDOM	48	ITALY	7
BRITISH MALAYA	39	CHINA	6
NETHERLANDS	39	INDIA, IRAN, BURMA	5
PORTUGAL	37	BRAZIL	3

is understood that its fisheries program probably will be carried out by a separate division within the Organization.

TABLE II--WHALE PRODUCTION

COUNTRY	TOTAL NUMBER OF WHALES	OIL PRODUCTION (BARRELS*)	EXPEDITIONS		
			SHORE STATIONS	FACTORY SHIPS	KILLER BOATS
BRITISH EMPIRE	11,335	897,741	2	9	81
NORWAY	11,871	853,867	3	12	99
JAPAN	7,540	493,476	-	6	49
GERMANY	5,066	374,149	-	5	41
UNITED STATES	1,338	102,388	2	1	13
PANAMA	907	68,853	-	1	8
ARGENTINA	1,024	66,826	1	-	6
SOVIET UNION	476	18,854	-	1	3
CHILE	407	5,797	1	1	4
PORTUGAL	389	6,920	-	-	-
DENMARK	178	5,197	2	-	7
ICELAND	130	3,764	1	-	3
TOTAL	40,662	2,887,832	12	36	314

*ONE BARREL = 1/6 LONG TON.

The immediate effect of FAO on international fisheries may not be great because it is a new organization just developing a program. The long term effect, however, should be beneficial, particularly if FAO is wholeheartedly supported by the Member nations, because its aim is to promote cooperation in the international field rather than competition.

0-0-0

PERMANENT ADDRESSES AND TITLES OF THOSE ATTENDING FISHERIES COMMITTEE MEETINGS

AUSTRALIA:

Dr. M. F. Day,
Australian Scientific Liaison Office,
Australian Legation, WASHINGTON, D. C.

Mr. J. U. Carside,
Australian Government Trade Commissioner,
NEW YORK, N. Y.

BELGIUM:

Mr. Georges Lalmand,
Chargé de mission of the Belgian Ministry of Food,
31 Schoenmarkt, ANTWERP, BELGIUM.

CANADA:

Dr. D. B. Finn,
Deputy Minister of Fisheries,
OTTAWA, ONTARIO.

Dr. A. T. Cameron, Professor of Biochemistry,
Faculty of Medicine, University of Manitoba,
WINNIPEG, MANITOBA. (Chairman, Fisheries Research Bd. of Canada)

PERMANENT ADDRESSES AND TITLES OF THOSE ATTENDING FISHERIES COMMITTEE MEETINGS (CONT.)

- CANADA (Cont.): Dr. Arthur Labrie,
Deputy Minister, Dept. of Maritime Fisheries,
QUEBEC, P. Q.
- Mr. C. J. Morrow,
Vice-President, National Sea Products Limited,
LUNenburg, NOVA SCOTIA.
- Mr. S. K. Murray,
Asst. General Manager, B. C. Packers Limited,
Box 939, VANCOUVER, B. C.
- Dr. J. B. Collip,
Director, Research Institute of Endocrinology,
McGill University, MONTREAL, P. Q.
(Chairman, Associate Committee on Medical Research of the National
Research Council of Canada)
- Dr. Georges Prefontaine,
Directeur de l'Institut de Biologie,
Universite de Montreal, MONTREAL, P. Q.
- CHINA: Mr. Ecom K. F. Wang,
Bureau of Animal Husbandry and Fishery,
Ministry of Agriculture and Forestry, CHUNGKING, CHINA.
- DENMARK: Mr. Mogens Jul,
Forstander for Fiskeridirektoratets,
Forsogslaboratorium,
Oster Voldgade 10, KOBENHAVN K.
- Mr. A. P. Jacobsen,
Department of Agriculture,
COPENHAGEN, DENMARK.
- FRANCE: Mr. M. Terrin,
Directeur des Pêches maritimes,
Ministere de la Marine marchande,
3 Place de Fontenoy,
PARIS VII, FRANCE
- GREECE: Mr. C. Vasmadzides,
Agricultural Bank of Greece,
ATHENS, GREECE.
- ICELAND: Hon. Mr. Thor Thors,
Legation of Iceland,
WASHINGTON, D. C.
- INDIA: Dr. Bains Prashad, O. B. E.,
Fisheries Development Adviser to the Govt. of India,
Department of Agriculture, Secretariat,
NEW DELHI, INDIA.
- MEXICO: Ing. Alfonso Gonzalez Gallardo,
Sub-Secretario de Agricultura y Fomento,
MEXICO, D. F.

PERMANENT ADDRESSES AND TITLES OF THOSE ATTENDING FISHERIES COMMITTEE MEETINGS (CONT.)

- NETHERLANDS: Dr. D. J. van Dijk
Chief, Division of Fisheries,
Ministry of Agriculture, Fisheries and Food,
18-20, Wassenaarscherweg,
THE HAGUE, HOLLAND.
- NEW ZEALAND: Mr. G. M. Pottinger,
Secretary, Export Marketing Division,
P. O. Box 417,
WELLINGTON, NEW ZEALAND.
- Mr. W. L. Middlemass,
311 Daly Avenue,
OTTAWA, ONTARIO.
- NORWAY: Mr. Olav Nøtveit, M. Sc.,
Director of the Norwegian Fisheries Research Station,
BERGEN, NORWAY.
- Mr. G. M. Gerhardsen,
Adviser to the Director of the Norwegian Fisheries,
Stove Parkvei 34, BERGEN, NORWAY.
- PANAMA: Mr. J. E. Heurtematte,
Commercial Counselor, Embassy of Panama,
WASHINGTON, D. C.
- PHILIPPINES: Dr. Leopoldo T. Ruiz,
Member, Technical Committee to the President of the Philippines,
Philippine Commonwealth,
1617 Mass. Ave., N. W., WASHINGTON, D. C.
- UNION OF SOUTH AFRICA: Mr. G. M. Dreosti,
Officer in Charge of Dehydration and Cold Storage,
Union of South Africa,
48-Queen Victoria St., CAPE TOWN.
- Mr. D. J. Gardner,
South African Legation,
3101 Massachusetts Ave., N. W., WASHINGTON 8, D. C.
- U. S. S. R.: Mr. E. Nikishin,
Soviet Purchasing Commission,
1610 Park Road, WASHINGTON, D. C.
- UNITED KINGDOM: Dr. John A. Lovern,
Dept. of Scientific and Industrial Research,
Torry Research Station, ABERDEEN, SCOTLAND.
- Mr. P. D. H. Dunn,
Principal Assistant Secretary,
Ministry of Agriculture and Fisheries,
St. Stephen's House, Victoria Embankment, LONDON S. W. 1.
- Mr. Ray Gushue,
Chairman, Nfld. Fisheries Board,
ST. JOHN'S, NEWFOUNDLAND.
- UNITED STATES: Mr. Andrew W. Anderson,
Chief, Division of Commercial Fisheries,
Fish and Wildlife Service, U. S. Dept. of the Interior,
WASHINGTON 25, D. C.

PERMANENT ADDRESSES AND TITLES OF THOSE ATTENDING FISHERIES COMMITTEE MEETINGS (CONT.)

UNITED STATES (Cont.): Mr. E. G. Cale,
Associate Chief, Commodities Division,
State Department, WASHINGTON 25, D. C.

VENEZUELA: Dr. M. A. Falcon-Briceno,
Commercial Counselor,
Embassy of Venezuela, WASHINGTON, D. C.

SECRETARIAT: Dr. A. W. H. Needler,
Director, Atlantic Biological Station,
ST. ANDREWS, N. B., CANADA.

Dr. Jean-Louis Tremblay,
Dept. of Biology, Faculte of Science,
Laval University,
Boulevard de l'entente, QUEBEC, P. Q., CANADA.

Miss Flora Love,
Department of Fisheries,
OTTAWA, CANADA.

COMMERCIAL FISHERIES OF THE WORLD

FISHERMEN, FISHING CRAFT, AND PRODUCTION BY CONTINENTS AND COUNTRIES

Continent and country	Year	No. of fishermen engaged	No. of fishing craft	Quantity (Thousands of lbs.)	Remarks
<i>North America</i>					
Canada.....	1941	63,745	37,708	1,198,865	
<i>Central America and West Indies:</i>					
Bahamas.....	1936	390	65	1,275	
Barbados.....	1940	1,900	536	1,000	
British Honduras.....	1940			500	Estimated
Costa Rica.....	1940			1,000	"
Cuba.....	1940			15,000	"
Dominican Republic.....	1940			1,000	"
El Salvador.....	1940			700	"
French West Indies.....	1940			9,000	"
Guatemala.....	1940			100	"
Haiti.....	1940			2,000	"
Honduras.....	1940			300	"
Jamaica.....	1940	1,200	400	10,000	"
Leeward and Windward Islands.....	1940	1,437	327	3,600	" (Men and craft for Leeward Is. only)
Netherlands West Indies.....	1940			1,000	"
Nicaragua.....	1940			300	"
Panama.....	1940			3,000	"
Puerto Rico.....	1940	1,403	716	3,080	"
Trinidad and Tobago.....	1940	2,870	948	6,000	"
Virgin Islands (British).....	1940	200	72	160	
Virgin Islands (United States).....	1940	405	186	616	
Greenland.....	1937			6,678	Exports only
Mexico.....	1940		2,195	155,141	1941 production reported at 109.98 million pounds valued at 4,990,029 dollars
Newfoundland.....	1937	34,458		450,000	Quantity excludes whales and seals
St. Pierre and Miquelon.....	1942		144	1,638	Salted green fish only
United States and Alaska.....	1940	124,705	71,810	4,059,524	1943 production estimated at 4,000 million pounds, valued at 180 million dollars
TOTAL, North American countries.....				5,931,477	
<i>South America</i>					
Argentina.....	1940	2,000	824	121,122	1942 production reported at 126.8 million pounds; fishermen and craft for 1933
Brazil.....	1940	80,002	31,300	134,252	Fishermen and craft for 1938; 1943 production estimated at 176 million pounds
British Guiana.....	1940	602	384	500	Estimated
Chile.....	1942	5,617	2,410	70,869	"
Colombia.....	1940			3,500	"
French Guiana.....	1940			1,792	"
Peru.....	1940	6,568	2,404	26,097	"
Surinam.....	1940			3,748	"
Uruguay.....	1934	313		6,677	Fishermen are for 1940; 1940 production reported at 7.3 million pounds
Venezuela.....	1940			100,000	Estimated
TOTAL, South American countries.....				468,557	
<i>Asia</i>					
Arabia.....	1936			2,003	Exports only
British Malaya.....	1940	27,069	11,167	196,768	
Ceylon.....	1935	1,493	6,959	1,800	Estimated
China.....	1939			2,890,000	"
Chosen.....	1939			2,300,000	Quantity estimated
Hawaii.....	1937	4,000	999	19,706	Fishermen and craft estimated
India, Iran, Burma.....	1932			2,000,000	Estimated
Indo-China.....	1937			79,638	Exports only
Japan.....	1936	1,102,502	366,267	8,107,816	
Kwangtung Leased Territory.....	1937	305,000		132,704	
Palestine.....	1940	1,663	530	3,821	Fishermen and craft for 1941; 1942 production reported at 3.9 million pounds
Philippines.....	1938			178,055	
Thailand.....	1935			44,316	Exports only
Soviet Union (Asia only).....	1938			2,127,840	
TOTAL, Asiatic countries.....				18,084,467	

(Continued on next page)

COMMERCIAL FISHERIES OF THE WORLD—Continued

Continent and country	Year	No. of fishermen engaged	No. of fishing craft	Quantity (Thousands of lbs.)	Remarks
<i>Europe</i>					
Belgium.....	1938	1,784	445	86,254	Fishermen and craft for 1936
Bulgaria.....	1940			15,871	
United Kingdom:					
England and Wales.....	1938			1,711,704	Quantity does not include data on crabs, lobsters, and oysters
Scotland.....	1938			592,938	"
Ireland.....	1941	8,865	3,137	30,589	"
Czechoslovakia.....	1937			6,500	
Danzig.....	1931	2,100	811	6,303	
Denmark.....	1940		15,350	250,800	Craft for 1937
Estonia.....	1935			40,477	1943 production reported at 22 million pounds
Faroe Islands.....	1938	2,930	1,850	55,100	Estimated
Finland.....	1933			79,362	
France.....	1937	73,989	23,201	788,400	
Germany.....	1938	30,000	20,000	1,596,919	Fishermen and craft estimated; includes salt-water species only
Greece.....	1937	6,860	2,015	39,537	Fishermen estimated; 1938 production reported at 51 million pounds
Iceland.....	1942	5,003	708	740,514	Fishermen and craft are for 1943
Italy.....	1937	108,000	42,051	304,000	Fishermen estimated
Latvia.....	1932	3,907	524	29,752	
Lithuania.....	1938			5,788	
Maltese Islands.....	1938	1,300	700	2,390	
Netherlands.....	1939	17,570	3,443	350,367	Estimated
Norway.....	1939	115,000	74,580	2,041,620	1942 production reported at 1,500 million pounds
Poland.....	1937	1,822	953	30,822	
Portugal.....	1940	36,837	13,630	200,588	Fishermen are for 1941; 1941 production reported at 403.5 million pounds
Rumania.....	1938			79,738	1942 production reported at 89.6 million pounds
Spain.....	1940	195,000	40,000	967,252	1943 production reported at 979 million pounds; fishermen and craft estimated
Sweden.....	1939	23,114	20,378	292,866	1941 production reported at 249.4 million pounds
Switzerland.....	1942	135		631	
Turkey.....	1935			51,000	Quantity estimated
Soviet Union (Europe only).....	1938			1,304,160	
Yugoslavia.....	1936	18,294	6,293	14,300	1938 production reported at 17.6 million pounds
TOTAL, European countries.....				11,776,832	
<i>Africa</i>					
Algeria.....	1936	3,609	1,081	44,780	
Angola.....	1936			31,517	Sardines only
Belgian Congo.....	1923			23,681	Exports only
Canary Islands.....	1931	2,500	250	11,638	Quantity estimated
Cyrenaica.....	1928			11,758	Sponges, sardines, and tuna only
Egypt.....	1938	52,800	10,022	70,767	
French Morocco.....	1933	2,323	511	42,580	
French West Africa.....	1935			23,212	
Kenya.....	1931			10,988	Exports only
Morocco (Spanish and International Zone).....	1933			30,864	
Seychelles.....	1925	600	350	1,560	
Southwest Africa.....	1934			6,000	Estimated
Tripoli.....	1934			1,910	Tuna only
Tunisia.....	1937	10,820	3,130	23,346	
Union of South Africa.....	1936	7,400		60,000	Fishermen estimated
TOTAL, African countries.....				394,601	
<i>Oceania</i>					
Australia.....	1939	9,081	5,462	72,732	
Fiji Islands.....	1931			2,838	
New Zealand.....	1939	2,218	1,270	48,400	1943 production reported at 35 million pounds
TOTAL, Oceanic countries.....				123,970	
GRAND TOTAL.....				36,779,904	

NOTE: These statistical data represent a compilation from all available sources—publications (including consular reports), manuscripts, and correspondence.

FISHERY RESOURCES OF THE UNITED STATES

Senate Document No. 51, "Fishery Resources of the United States," has just been published and made available to the public by the United States Congress. Congress has long felt the need for a condensed, readable book that would serve as a basic reference on the fisheries and fishery industries of the United States, and at its request, the Fish and Wildlife Service of the Department of the Interior has prepared an attractive illustrated book of 135 pages that will appeal to everyone. Each page tells a living story in words and pictures of an important phase of the Nation's fisheries. The book will be of interest to fishermen, processors, dealers, anglers, and the general public. It is particularly suited for use in the public schools in connection with courses in biology, geography, and civics.

Copies may be purchased at 40 cents each from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Michigan.

128D

Ann Arbor,

University of Michigan General Library.

Form NWA - 12/45 - 1400

OFFICIAL BUSINESS
Penalty No. 1015

WASHINGTON 25, D. C.

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
UNITED STATES

PENALTY FOR PRIVATE USE TO AVOID
PAYMENT OF POSTAGE, \$300
(PMG)

